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REMARKS

Favorable action is respectfully requested.

The Director is authorized to charge any fee deficiency required by this paper or credit any overpayment to Deposit Account No. 23-1123.

Respectfully submitted,

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By: 

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MARKED-UP VERSION OF REPLACEMENT CLAIMS

1. (Twice Amended) A disc drive comprising:  
a disc rotationally coupled to a chassis;  
a movable head suspension assembly coupled to an actuator and movable thereby having a head coupled thereto to read or write to a surface of the disc;  
a vibration detection transducer supported on the movable head suspension assembly to induce a transducer ~~signal in response to head vibration~~ proportional to movement of the head; and  
a threshold amplitude detector configured to receive the transducer signal and outputting ~~output~~ a level detected signal having a signal amplitude above a threshold amplitude indicative of the head vibration.
3. (Amended) The disc drive of claim 1 wherein the threshold amplitude detector includes a frequency filter.
5. (Amended) The disc drive of claim 1 wherein the vibration detection transducer is a piezoelectric material.
6. (Amended) The disc drive of claim 1 wherein the vibration detection transducer is an electrostatic transducer.
7. (Twice Amended) The disc drive of claim 1 and further comprising:  
a process controller coupled to the detector and configured to receive the outputted level detected signal and output a process command to reexecute a write command in drive memory.

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8. (Twice Amended) The disc drive of claim 1 and further comprising:

a microactuator controller coupled to the vibration detection transducer on the movable head suspension assembly and configured to transmit a signal to the vibration detection transducer to move the head.

9. (Twice Amended) The disc drive of claim 1 wherein the disc drive includes a plurality of discs rotationally coupled to the chassis and a plurality of movable head suspension assemblies having a heads coupled thereto to read or write to surfaces of the plurality of discs and including a vibration detection transducer coupled to each of the plurality of movable head suspension assemblies.

10. (Twice Amended) The disc drive assembly of claim 1 wherein the vibration detection transducer is configured to operate between a detection mode and an actuation mode, in the detection mode, the transducer detecting head vibration and in the actuation mode the vibration detection transducer receiving a signal to energize the vibration detection transducer to ~~moving~~move the head.

11. (Twice Amended) The disc drive assembly of claim 10 including:

a microactuator controller coupled to the vibration detection transducer and configured to operate the vibration detection transducer in the actuation mode.

12. (Twice Amended) A method for operating a disc drive

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comprising steps of:

- (a) providing a vibration detection transducer supported on a movable head suspension assembly having a head coupled thereto configured to generate a transducer signal indicative of head vibration;
- (b) moving the movable head suspension assembly to position the head for read write operations; and
- (c) detecting a signal amplitude above a threshold amplitude the transducer signal and outputting a level detected signal indicative of head vibration.

13. (Amended) The method of claim 12 wherein the vibration detection transducer is a piezoelectric transducer.

14. (Twice Amended) The method of claim 12 and further comprising the step of:

- (d) transmitting a signal to the vibration detection transducer on the movable suspension assembly to move the head.

18. (Amended) The method of claim 12 including a microactuator controller coupled to the vibration detection transducer and configured to transmit a signal to the vibration detection transducer to move the head and comprising the step of:

- (d) selectively operating the disc drive in a detection mode and an actuation mode, in the detection mode the vibration detection transducer detecting head vibration and in the actuation mode, the vibration detection transducer moving the head.

19. (Twice Amended) A drive assembly comprising:

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a movable head suspension assembly ~~supporting a head;~~  
and  
~~means on the movable head suspension assembly for~~  
detecting head vibration a detector that provides a  
signal indicative of a vibration associated with  
the head suspension assembly and that is responsive  
to the vibration being greater than a threshold  
value.